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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONG HO KIM

Appeal 2016-003232¹ Application 13/144,909² Technology Center 3600

Before HUBERT C. LORIN, NINA L. MEDLOCK, and BRADLEY B. BAYAT, *Administrative Patent Judges*.

MEDLOCK, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–4, 6–8, 10, 13–15, and 17. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ Our decision references Appellant's Appeal Brief ("App. Br.," filed July 9, 2015) and Reply Brief ("Reply Br.," filed February 4, 2016), and the Examiner's Answer ("Ans.," mailed December 4, 2015), and Non-Final Office Action ("Non-Final Act.," mailed February 12, 2015).

² Appellant identifies SK Planet Co., Ltd. as the real party in interest. App. Br. 2.

CLAIMED INVENTION

Appellant's claimed "invention relates to a system and method for identifying multiple types of electronic money, and an apparatus employing the same" (Spec. ¶ 1).

Claims 1, 3, 6, 8, 13, and 15 are the independent claims on appeal. Claim 1, reproduced below with bracketed numerals added, is illustrative of the claimed subject matter:

- 1. A system for identifying multiple types of electronic money, the system comprising:
- [1] an electronic money card unit configured to store a first type of electronic money; and
 - [2] an electronic money terminal unit configured to
 - [3] read application identification information corresponding to the first type of electronic money from the electronic money card unit,
 - [4] when the application identification information indicates a preset default electronic money application for handling the first type of electronic money, execute the preset default electronic money application,
 - [5] when the application identification information includes no indication of the preset default electronic money application, select an electronic money application corresponding to the application identification information, among electronic money applications stored in the electronic money terminal, and execute the selected electronic money application, and
 - [6] process an electronic money service including charging, payment, and transfer of the first type of electronic money through the executed electronic money application, and

- [7] wherein, when the electronic money terminal unit determines that the application identification information corresponds to two or more compatible electronic money applications among the stored electronic money applications in the electronic money terminal, the electronic money terminal is further configured to
 - [8] determine priorities of the two or more compatible electronic money applications,
 - [9] appoint, among the two or more compatible electronic money applications, a compatible electronic money application having a highest priority,
 - [10] execute the appointed compatible electronic money application, and
 - [11] process the electronic money service through the executed electronic money application.

REJECTIONS

Claims 1–4, 6–8, 10, 13–15, and 17 are rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter.

Claims 1–4, 6–8, and 10 are rejected under 35 U.S.C. § 103(a) as unpatentable over Matsumoto (US 2009/0050691 A1, pub. Feb. 26, 2009), Tushie et al. (US 2003/0050899 A1, pub. Mar. 13, 2003) (hereinafter "Tushie"), Mennie et al. (US 2003/0118228 A1, pub. June 26, 2003) (hereinafter "Mennie"), and Davis et al. (US 6,282,522 B1, iss. Aug. 28, 2001) (hereinafter "Davis").

Claims 13–15 and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Matsumoto, Tushie, and Mennie.

ANALYSIS

Non-Statutory Subject Matter

Under 35 U.S.C. § 101, an invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include an implicit exception: "[1]aws of nature, natural phenomena, and abstract ideas" are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories*, *Inc.*, 132 S. Ct. 1289, 1300 (2012), "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice Corp.*, 134 S. Ct. at 2355. The first step in that analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered "individually and 'as an ordered combination" to determine whether there are additional elements that "transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo*, 132 S. Ct. at 1297).

The Court acknowledged in *Mayo*, that "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 132 S. Ct. at 1293. We, therefore, look to whether the claims focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the

abstract idea and merely invoke generic processes and machinery. *See Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

Here, in rejecting the pending claims under § 101, the Examiner finds that the claims are directed to "identifying multiple types of electronic money," i.e., to a fundamental economic practice and, therefore, an abstract idea (Non-Final Act. 6–7; *see also* Ans. 3–4);³ and that the additional elements or combination of elements in the claims, other than the abstract idea, amounts to no more than "generic computer elements [that] do not add a meaningful limitation to the abstract idea because they would be routine in any computer implementation of an electronic money application that would

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³ The Examiner cites, as examples of cases finding abstract ideas, Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709 (Fed. Cir. 2014) (using advertising as an exchange or currency); Bilski v. Kappos, 561 U.S. 593 (2010) (hedging risk); Alice, 134 S. Ct. 2347 (mitigating settlement risk); Dealertrack, Inc. v. Huber, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (processing loan information); Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012) (managing an insurance policy); Planet Bingo, LLC v. VKGS LLC, 576 F. App'x. 1005 (Fed. Cir. 2014) (managing a game of Bingo); Gametek LLC v. Zynga, Inc., Nos. CV 13–2546 RS, CV–13–3089–RS, CV–13–3472–RS, CV–13–3493– RS, 2014 WL 1665090 (N.D. Cal. Apr. 25, 2014), aff'd. 597 F. App'x. 644 (Fed. Cir. 2015) (allowing players to purchase additional objects during a game); Accenture Global Servs., GmbH v. Guidewire Software, Inc., 728 F.3d 1336, 1338 (Fed. Cir. 2013) (generating rule-based tasks for processing an insurance claim); Content Extraction & Transmission v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343 (Fed. Cir. 2014) (data recognition and storage); Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344 (Fed. Cir. 2014) (organizing information through mathematical correlations); and Paragraph IIIA of the "July 2015 Update: Subject Matter Eligibility" to 2014 Interim Guidance on Subject Matter Eligibility, 79 Fed. Reg. 74618 (Dec. 16, 2014).

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be routinely used by those of ordinary skill in the art in order to process an electronic money service" (Non-Final Act. 7).

Independent Claim 1

Focusing specifically on claim 1, and addressing the first step of the *Mayo/Alice* framework, Appellant asserts that "the Examiner has failed to provide a convincing rationale or evidence to prove why the claimed subject matter is considered as an abstract idea" (App. Br. 15 (emphasis omitted)). Appellant charges that although the Examiner "immediately discussed why the claimed subject matter does not include 'significantly more," the Examiner provided no explanation "as to why the claimed subject matter is considered as an abstract idea" (*id.*). Appellant notes that the Supreme Court, in *Alice*, cited several references to establish that the claimed subject matter was directed to a fundamental economic practice, i.e., intermediated settlement, and, therefore, to an abstract idea (*id.*). And Appellant ostensibly maintains that the Examiner is likewise required to cite authority here in order to meet "the first step of the *Alice Corp*. [test]" (*id.* at 15–16).

As an initial matter, we find nothing in *Alice* that requires the Office to identify specific references to support a finding that a claim is directed to an abstract idea. Nor are we aware of any other controlling authority that requires the Office to "prove, by convincing evidence," that a claim is directed to an abstract idea. Instead, the Federal Circuit has repeatedly observed that "the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production." *Hyatt v. Dudas*, 492 F.3d. 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural burden of establishing a prima facie case when its rejection

satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). Thus, all that is required of the Office is that it set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Id.*; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (Section 132 "is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.").

Appellant does not contend here that the § 101 rejection was not understood or that the Examiner otherwise failed to comply with the notice requirements of § 132. And for all the criticism of a lack of evidentiary support, Appellant puts forward no rebuttal evidence to demonstrate that the claimed subject matter is not an abstract idea.

Responding to the Examiner's Answer, Appellant argues that, in applying step 1 of the *Alice* analysis, "the Examiner ignored 96% of the claim language, including key aspects and the tangible nature of the invention" (Reply Br. 4). Appellant charges that "the Examiner oversimplified the claimed subject matter as 'a system for identifying multiple types of electronic money," and that this led to the erroneous conclusion that the claims are directed to an abstract idea (*id.* at 5–6). Yet, claim 1, on its face, is directed to "[a] system for identifying multiple types of electronic money" (App. Br. 33, Claims Appendix). The "Technical Field" section of the Specification also explicitly describes the claimed

invention as "a system and method for identifying multiple types of electronic money" (Spec. ¶ 1).

Appellant notes that claim 1 recites "features of the electronic money card unit and the electronic money terminal unit" (Reply Br. 5), i.e., physical components. But, it is clear from the Specification, including the claim language, that the focus of the claims is not on the improvement of electronic money card units and/or electronic money terminal units, but instead on implementation of the abstract idea, i.e., identifying multiple types of electronic money. These physical components merely provide the generic environment in which to implement this abstract idea. And, as the Supreme Court made clear in *Alice*, the recitation of generic computer limitations is not enough to transform an otherwise patent-ineligible abstract idea into a patentable invention. *See Alice Corp.*, 134 S. Ct. at 2358.

Turning to the second step of the *Mayo/Alice* framework, Appellant argues that even if the claimed subject matter is directed to an abstract idea, claim 1 is nonetheless patent-eligible because claim 1 "recites significantly more than an abstract idea" (App. Br. 16). Quoting the language of claim 1, and pointing specifically to limitations [7] – [11], Appellant asserts that "these features are distinct and distinguished from the applied art of record" (*id.*; *see also* Reply Br. 6 (arguing that limitations [4] and [9] "aren't sufficiently taught by the prior art in the record.")). Yet to the extent that Appellant maintains that claim 1 is patent-eligible because the claim is novel and/or non-obvious, Appellant misapprehends the controlling precedent. Although the second step in the *Alice/Mayo* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or non-obviousness, but rather, a search for "an element or combination of

elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself." *Alice Corp.*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent-ineligible. *See Mayo*, 132 S. Ct. at 1304.

Further responding to the Examiner's Answer, Appellant argues that the rejection under § 101 cannot be sustained because "the Examiner failed to recognize the 'inventive concept' imparted by the specific claim language" that goes beyond the alleged abstract idea (Reply Br. 6). According to Appellant, the claimed steps of "when the application identification information indicates a preset default electronic money application for handling the first type of electronic money, execute the preset default electronic money application" and "appoint, among the two or more compatible electronic money applications, a compatible electronic money application having a highest priority" include numerous inventive concepts, which render claim 1 patent-eligible (*id.*). Yet rather than constituting "significantly more," these steps are merely part of the abstract idea itself, and require no more than a generic computer to perform generic computer functions.

Appellant also argues that, like the claims found patent-eligible in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), claim 1 includes limitations (i.e., limitations [4] and [9]) that "specify how interactions with the Internet are manipulated to yield a desired result" (Reply Br. 7 (citing *DDR Holdings*, 773 F.3d at 1258)). But Appellant does not identify the "interactions with the Internet" that the claimed invention allegedly manipulates; nor does Appellant otherwise explain how the

claimed invention makes other than routine and conventional use of the Internet. *Cf. Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1371 (Fed. Cir. 2015) ("claims here do not address problems unique to the Internet, so *DDR* has no applicability"). In fact, claim 1 does not even recite the Internet or any computer network.

Finally, as to Appellant's argument that the Examiner "failed to adhere to the statutory presumption of validity" (Reply Br. 7), we direct Appellant's attention to *In re Caveney*, 761 F.2d 671 (Fed. Cir. 1985). Although patents are entitled to a presumption of validity under 35 U.S.C. § 282, patent applications are not entitled to the procedural advantages of § 282. *Id.* at 674.

We are not persuaded, for the reasons set forth above, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101. Therefore, we sustain the Examiner's rejection.

Independent Claims 3, 6, 8, 13, and 15 and Dependent Claims 7, 10, 14, and 17

Appellant argues that "[i]ndependent claim 3 recites, in part, one or more features[,] which correspond to the aforementioned features of claim 1[,] and are distinct and distinguished from the applied art of record." Therefore, according to Appellant, claim 3 recites significantly more than an abstract idea (App. Br. 17). Appellant makes substantially the same argument with respect to each of independent claims 6, 8, 13, and 15 (*see id.* at 17–18).

We found this argument unpersuasive, with respect to claim 1, for the reasons set forth above. And we find it equally unpersuasive with respect to claims 3, 6, 8, 13, and 15.

Therefore, we sustain the Examiner's rejection of independent claims 3, 6, 8, 13, and 15 under 35 U.S.C. § 101. We also sustain the rejection of dependent claims 7, 10, 14, and 17, which are not argued separately.

Dependent claims 2 and 4

Claim 2 depends from independent claim 1 and recites, *inter alia*, that "the electronic money card unit is an Integrated Circuit (IC) module" (App. Br. 34, Claims Appendix). Claim 4 depends from independent claim 3, and includes substantially similar language.

Appellant argues that claim 2 recites significantly more than an abstract idea, and is patent-eligible, because a person of ordinary skill in the art would understand that an IC module is a machine; Appellant argues that claim 4 is patent-eligible for the same reason (App. Br. 18–19). Yet there is no indication in the Specification that the recited IC module is other than a generic component, and no indication that the IC module is used in other than its normal, expected manner, e.g., to store data that are then communicated to an electronic money terminal unit. Again, as the Supreme Court has made clear, the recitation of generic computer limitations is not enough to transform an otherwise patent-ineligible abstract idea into a patent-eligible invention. *See Alice Corp.*, 134 S. Ct. at 2358.

In view of the foregoing, we sustain the Examiner's rejection of dependent claims 2 and 4 under 35 U.S.C. § 101.

Obviousness

Independent Claims 1, 3, 6, and 8 and Dependent Claims 2, 4, 7, and 10

We are persuaded by Appellant's argument that the Examiner erred in rejecting independent claims 1, 3, 6, and 8 under 35 U.S.C. § 103(a) because

neither Matsumoto nor Mennie, on which the Examiner relies, discloses or suggests that "the electronic money terminal unit determines . . . two or more compatible electronic money applications" and "is further configured to determine priorities of the two or more compatible electronic money applications" and "appoint, among the two or more compatible electronic money applications, a compatible electronic money application having a highest priority" as recited in claim 1, and similarly recited in claims 3, 6, and 8 (App. Br. 21–27).

Matsumoto is directed to "an electronic money terminal for performing settlement processing on multiple types of electronic money stored in an IC chip" (Matsumoto \P 1). Matsumoto discloses that "a plurality of settlement processing programs are stored for a plurality of services associated with electronic money, and that the settlement processing program for the electronic money service selected by the selection means is executed, allowing a single electronic money terminal to handle multiple types of electronic monies" (id. \P 6).

In rejecting independent claims 1, 3, 6, and 8 under 35 U.S.C. § 103(a), the Examiner cites paragraphs 5, 6, 52, 57, 61, 65, and 70 of Matsumoto as disclosing the argued limitations (Non-Final Act. 14–15). In particular, the Examiner points to the disclosure in paragraph 57 that "the user can select only electronic money stored in the IC card 10 and the storage unit 120" (*id.* at 15).

We have reviewed the cited portions of Matsumoto, and we find nothing there that discloses or suggests determining priorities of two or more compatible electronic money applications. Matsumoto discloses an input unit 132 that a user can use to select an electronic money service (*see, e.g.*, Matsumoto ¶ 52 ("user uses the ten key on the input unit 132 to select an electronic money service to be used among the service names of the electronic money services displayed on the display unit 131 and presses the OK button (Step S6)"). But the user in Matsumoto selects a money service, not a settlement processing program (i.e., an "electronic money application," as recited in claim 1). Matsumoto discloses that "control unit 150 causes the settlement processing program for the electronic money having the [user-entered] service ID to be executed, among the settlement processing programs stored in the storage unit 120 (Step S16)" (Matsumoto ¶ 62). But we find nothing in the cited portions of Matsumoto that discloses or suggests that "two or more" settlement processing programs may be compatible with the user-entered electronic money service, or assigning any priorities to the settlement processing programs.

As an alternative rationale, the Examiner cites paragraphs 2, 10, 12, 13, 21, 43, 50, 56, and 148 of Mennie as disclosing automatic selection of operating parameters (Non-Final Act. 5, 15–17), and reasons that it would have been obvious "to automate the selection of electronic money on a priority basis, in the Matsumoto terminal for processing multiple types of electronic money, as taught in the Mennie system" (*id.* at 16). In particular, the Examiner cites paragraphs 50 and 56 of Mennie, and reasons that "it is obvious that priorities can be set manually or pre-set by a user such that the system automatically determines the priorities of a plurality of electronic money applications" (*id.* at 5). The Examiner reproduces disclosure in paragraph 56 of Mennie that "system 10 defaults to the currency type of the

country where the system 10 is used" and reasons that "[i]t is implicit that a computer system defaults to the highest priority setting" (*id.* (citing dictionary definitions for "default")). The Examiner further reasons that "automating a manual activity is not sufficient to distinguish over the prior art" (*id.* at 17 (citing MPEP 2144.4.III; *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958)); *see also* Ans. 8)).

Mennie is directed to a customizable international note counter, and discloses that the note counter can be customized to count bills of various currencies and various denominations (Mennie \P 2). Mennie also discloses that the system "automatically determines appropriate operating parameters corresponding to a designated type of currency system and denomination" (*id.* \P 12).

As Appellant persuasively argues (App. Br. 22), although Mennie discloses automated selection of some parameters, the automated determination of "other operating parameters" occurs "after the type of currency system and denomination of the bills to be processed have been entered by the operator" (Mennie ¶ 50). In other words, after the type of currency is designated, other parameters corresponding to the operator-designated currency type are automatically selected by the system.

Mennie discloses that the system can be set to default settings that are compatible with the currency of the country where the system is used (i.e., rather than incompatible settings) (see Mennie ¶ 56 ("For example, if the system 10 were used in China, the system 10 could be set up to default to Chinese currency")). But, we fail to see how, and the Examiner does not explain how, setting the Mennie system to a default setting discloses or suggests prioritizing "two or more compatible electronic money

applications." For example, the Examiner has not shown that Mennie discloses that multiple settings are compatible with Chinese currency, and that the Mennie system establishes priorities among these multiple settings when Chinese currency is identified.

The Examiner's reliance on *In re Venner* also is misplaced. In that case, the prior art references disclosed all of the claimed elements, and the question was whether the combination of those old elements amounted to a patentable invention. *See In re Venner*, 262 F.2d 91, 96 (CCPA 1958) ("we find all the elements of appellants' combination in the prior art cited"). Here, the Examiner has not shown that the prior art discloses predetermined priorities assigned to different compatible electronic money applications (manually or otherwise). Thus, the Examiner's determination that it would have been obvious to automate the selection of an electronic money application "on a priority basis" (Non-Final Act. 16) is not supported by the record.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claims 1, 3, 6, and 8 under 35 U.S.C. § 103(a). For the same reasons, we also do not sustain the Examiner's rejection of dependent claims 2, 4, 7, and 10. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Independent claims 13 and 15 and dependent claims 14 and 17

Independent claims 13 and 15 include language substantially similar to the language of claim 1, and were rejected based on the same findings and rationale applied with respect to claim 1 (Non-Final Act. 42–58). Therefore, we do not sustain the Examiner's rejection under 35 U.S.C. § 103(a) of

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independent claims 13 and 15, and claims 14 and 17, which depend therefrom, for the same reasons set forth above with respect to claim 1.

DECISION

The Examiner's rejection of claims 1–4, 6–8, 10, 13–15, and 17 under 35 U.S.C. § 101 is affirmed.

The Examiner's rejections of claims 1–4, 6–8, 10, 13–15, and 17 under 35 U.S.C. § 103(a) are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(l)(iv).

AFFIRMED